201-764-6370

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PIONEER®

No. SI-F83003
Date: August, 1983

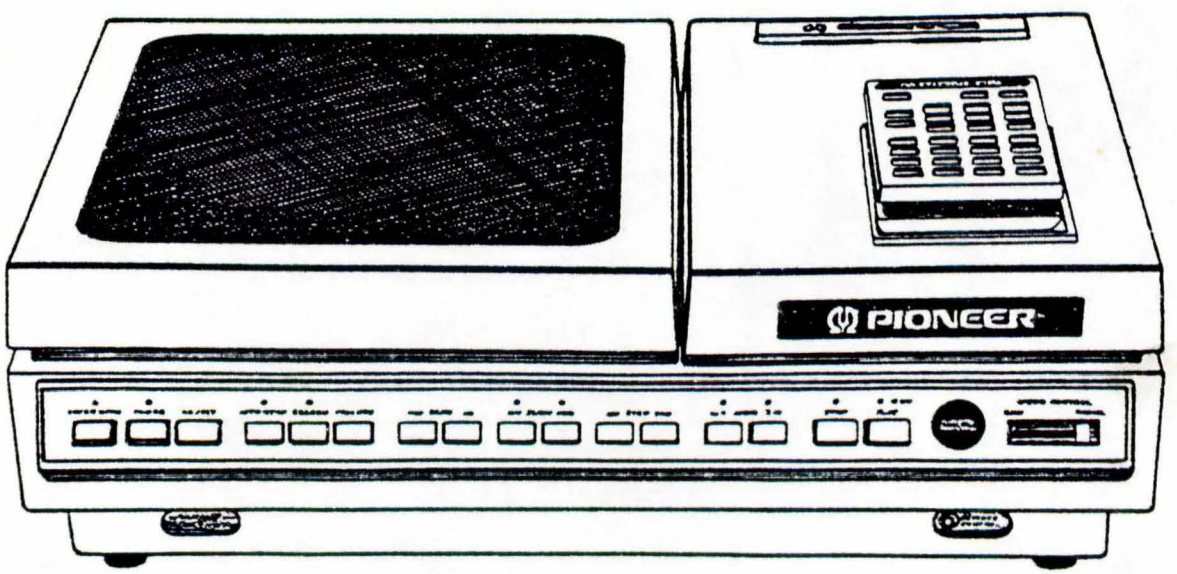
VIDEO DISC PLAYER

PR-7820

BASIC TROUBLE SHOOTING

This is a basic trouble shooting chart for the PR-7820. Some possible failures may not be listed here.

Before changing any components, clean the objective lense on the bottom (read) side, only. Also, perform a complete alignment of the board or related boards to be sure that the symptom is not an adjustment problem.



Technical Information Center

SYMPTOM	POSSIBLE CAUSE OF FAILURE
No "Stop Motion" Poor TRKG Error Signal TRKG Servo Loop does not close after scan	Adjust TRKG. (Optical) TRKG Z2 (μPC4558C) TRKG Z3 (TA2109) TRKG Z4 (μPC339C) TRKG Z5 (SN74LS221N) HEDA Z2 (μPC4558C)
No Focus	Optical Problem (Replace or Re-align) Check Laser Adjust FOCS TRKG FOCS Z1 (μPC4558C) FOCS Z6 (μPC4558C) TRKG Z1 (μPC4558C)
Will not go into play mode SPDL does not turn	MCPR Z10 (MK3850N) MCPR Z11 (MK3853N) MCPR Z12 (MK90005N) MCPR Z13 (ROM 0) CARG Z4 (TC4016BP) FOCS Z3 (SN74LS00N)
Carriage does not move Noisy Carriage	Park Micro Switch Carriage Wire Carriage Motor

SYMPTOM	POSSIBLE CAUSE OF FAILURE
Player Logic Malfunction	MCPR Z10 (MK3850N) MCPR Z11 (MK3853N) MCPR Z12 (MK90005N)
Carriage moves when power is applied	CARG Z1 (HD7406P) MCPR Z10 (MK3850N) MCPR Z11 (MK3853N) MCPR Z12 (MK90005N)
No Main Power No Laser Power	Cust Q5 ∿ Q9 (2SA968 B-O or Y) Fuse 1 ∿ 3 H.V. Block 47K ohm Ballast Resistor
No Interface with Computer Remote Indicator LED stays on Player will not accept commands from front panel or remote	MCPR Z2 (SN74LS00N) MCPR Z10 (MK3850N) MCPR Z11 (MK3853N) MCPR Z12 (MK90005N) MCPR Z13 (ROM 0) DSPL Z8, Z11 (SAF1032P) DSPL Z11, Z14 (TMM344P4503) D & CR Z20 (SN74LS164N)

SYMPTOM	POSSIBLE CAUSE OF FAILURE
SPDL Rotates when power is applied SPDL turns backwards (clockwise)	MCPR Z10 (MK3850N) MCPR Z12 (MK90005N) MCPR Z11 (MK3853N) SPDL Z14 (μPC339C) MCPR Z13 (ROM Ø) SYPS Z2 (MC7915CT) SPDL Z15 (μPC4558C) FOCS Z6 (μPC4558C)
No SPDL Lock	Adjust SPDL, VTBC SPDL Z5 (SN74LS221N) SPDL Z8 (SN74LS221N) SPDL Z12 (LM311) MCPR Z11 (MK3853N) VDEM Z1 (TA7302P)
No Audio	MCPR Z10 (MK3850N) AUDB Z6 (SN74LS00N)
No Video	VTBC Z201 (SL67960) VTBC Z205 (SN75107AN) STPM Z15 (SN74LS04N)
Color Flicker	Adjust VTBC, SPDL VTBC Z201 (SL67960)
Excessive Drop Outs	Adjust VDEM VDEM Z2 (SN75107AN) VDEM 1H DLY (DL-1)

SYMPTOM	POSSIBLE CAUSE OF FAILURE
No Color Lock	Adjust VTBC, SPDL VTBC Z1 (SN74LS00N) VTBC Z2 (μPC339C) VTBC Z4 (μPC4558C) VTBC Z5 (μPC4558C) VTBC Z6 (SN75107AN) VTBC Z7 (SN74221N) VTBC Z8 (SN74LS00N) VTBC Z10 (TL081CP) VTBC Z11 (TL081CP) VTBC Z12 (LM311P) VTBC Q3, Q29 (2SC1815Y) SPDL Z7 (SN74LS221)
Picture is too dark or too bright	Adjust VDEM, VTBC VTBC Z201 (SL67960) VTBC D8 (1S2473)
Picture is distorted or unstable	Adjust VTBC, SPDL, VDEM VTBC Z4 (μPC4558C) VTBC Z10 (TL081CP) VTBC Z11 (TL081CP) STPM Z1 (LM311P)

SYMPTOM	POSSIBLE CAUSE OF FAILURE
No Frame Display No Frame Display Background Invalid Frame Display	Adjust D & CR VR1 Adjust D & CR Z1 (SN75107AN) DSPL Z8,Z11 (SAF1032P) DSPL Z11, Z14 (TMM334P-4503) DSPL Z18 (SN74LS00) DSPL Z1 (SN75107) DSPL Z15 (SN74LS10N) MCPR Z12 (MK90005N)
Poor Search Performance	Optical Alignment Adjust TRKG FOCS STPM Z1 (LM311P)
Cover Doesn't Open	Lid -- Microswitch Park -- Microswitch Adjust "Park" Switch
Poor Inside Search	Adjust D & CR, VR1 (VDEM, VR-2)